

Application No.: 10/705,745  
Attorney Docket No: 0208us520  
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### Listing of Claims:

The following listing of claims replaces all prior versions and listings of claims in the application.

1.-33. (Canceled)

34. (New) A polypeptide exhibiting G-CSF cell proliferation activity, comprising an amino acid sequence that differs from the hG-CSF sequence shown in SEQ ID NO:1 in no more than 15 amino acid residues and which comprises the substitution Q70K.

35. (New) The polypeptide of claim 34, wherein at least one of amino acid residues K16, K23, K34 and K40 of SEQ ID NO:1 has been deleted or substituted with another amino acid residue.

36. (New) The polypeptide of claim 35, wherein at least one of K16, K23, K34 and K40 has been substituted with an R or Q residue.

37. (New) The polypeptide of claim 36, wherein the polypeptide further comprises at least one substitution selected from the group consisting of P5K, A6K, S7K, S8K, L9K, P44K, E45K, E46K, V48K, L49K, L50K, H52K, S53K, L54K, I56K, P57K, P60K, L61K, S62K, S63K, P65K, S66K, Q67K, A68K, L69K, L71K, A72K, G73K, S76K, Q77K, L78K, S80K, F83K, Q86K, G87K, Q90K, E93K, G94K, S96K, P97K, E98K, L99K, P101K, D104K, T105K, Q107K, L108K, D109K, A111K, D112K, F113K, T115K, T116K, W118K, Q119K, Q120K, M121K, E122K, E123K, L124K, M126K, A127K, P128K, A129K, L130K, Q131K, P132K, T133K, Q134K, G135K, A136K, M137K, P138K, A139K, A141K, S142K, A143K, F144K, Q145K, S155K, H156K, Q158K, S159K, L161K, E162K, V163K, S164K, Y165K, V167K, L168K, H170K, L171K, A172K, Q173K and P174K.

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38. (New) The polypeptide of claim 34, wherein the polypeptide further comprises at least one substitution selected from the group consisting of E46K, S66K, Q90K, D104K, T105K, Q120K, T133K, S142K, S155K, S159K, and H170K.
39. (New) The polypeptide of claim 38, wherein the polypeptide further comprises at least one substitution selected from the group consisting of Q90K, T105K, Q120K, S159K and T133K.
40. (New) The polypeptide of claim 34, wherein the polypeptide differs from the amino acid sequence shown in SEQ ID NO:1 in 2-10 amino acid residues.
41. (New) The polypeptide of claim 34, wherein the polypeptide differs from the amino acid sequence shown in SEQ ID NO:1 in no more than 8 amino acid residues.
42. (New) The polypeptide of claim 34, wherein the polypeptide is glycosylated.
43. (New) The polypeptide of claim 34, wherein the polypeptide further comprises at least one glycosylation site not present in SEQ ID NO:1.
44. (New) The polypeptide of claim 34, wherein the polypeptide further comprises a substitution or deletion of at least one amino acid residue in SEQ ID NO:1 which comprises an attachment group for a non-polypeptide moiety.
45. (New) The polypeptide of claim 44, wherein amino acid residue H170 has been deleted or substituted with another amino acid residue.

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46. (New) The polypeptide of claim 45, wherein amino acid residue H170 has been substituted with a Q residue.
47. (New) A polypeptide conjugate exhibiting G-CSF cell proliferation activity, the conjugate comprising
- (a) the polypeptide of claim 34, and
  - (b) at least one non-polypeptide moiety covalently attached to the polypeptide.
48. (New) The conjugate of claim 47, comprising two or more attached non-polypeptide moieties.
49. (New) The conjugate of claim 47, wherein the non-polypeptide moiety is a polymer.
50. (New) The conjugate of claim 49, wherein the polymer is selected from the group consisting of a polyethylene glycol (PEG), a polyvinylalcohol (PVA), a poly-carboxylic acid and a poly-(vinylpyrrolidone).
51. (New) The conjugate of claim 50, wherein the polymer is a polyethylene glycol selected from a linear polyethylene glycol and a branched polyethylene glycol.
52. (New) The conjugate of claim 51, wherein the polyethylene glycol has a molecular weight of about 1000-15,000 Da.
53. (New) The conjugate of claim 51, comprising 2-8 polyethylene glycols.
54. (New) A composition comprising the conjugate of claim 47, and a pharmaceutically acceptable carrier or excipient.

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55. (New) A method for treating a mammal having a general haematopoietic disorder, comprising administering to a mammal in need thereof an effective amount of the conjugate of claim 47.
56. (New) The method of claim 55, wherein the general haematopoietic disorder is leukemia.
57. (New) A method for preparing a polypeptide conjugate, the method comprising  
(i) preparing a polypeptide comprising an amino acid sequence that differs from the amino acid sequence shown in SEQ ID NO:1 in no more than 15 amino acid residues and which comprises the substitution Q70K, and  
(ii) attaching at least one non-polypeptide moiety to a lysine residue of the polypeptide, wherein the resulting conjugate exhibits G-CSF cell proliferation activity.
58. (New) The method of claim 57, wherein the step of preparing the polypeptide comprises: providing a culture comprising a host cell, the host cell comprising a polynucleotide comprising a nucleotide sequence which encodes the amino acid sequence of the polypeptide, culturing the culture under conditions which permit expression of the polypeptide, and recovering the polypeptide.
59. (New) The method of claim 58, wherein the host cell is a glycosylating host cell.
60. (New) The method of claim 59, wherein the glycosylating host cell is selected from the group consisting of an *S. cerevisiae* cell, a *Pichia pastoris* cell, a CHO cell, a BHK cell, an HEK 293 cell, and an SF9 cell.
61. (New) The method of claim 59, wherein the glycosylating host cell is an *S. cerevisiae* cell.

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62. (New) The method of claim 59, wherein the glycosylating host cell is a CHO cell.
63. (New) The method of claim 62, wherein the CHO cell is a CHO-K1 cell.
64. (New) The method of claim 58, wherein the host cell is a bacterial host cell.
65. (New) The method of claim 64, wherein the bacterial host cell is an *E. coli* cell.
66. (New) A method for preparing a composition, comprising mixing the polypeptide of claim 34 with a buffering agent.
67. (New) A method for preparing a composition, comprising mixing the conjugate of claim 47 with a buffering agent.